

Random Recollection of Paul Erdős

by
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I first met Erdős in 1946 in Princeton when I was a graduate student. I had read his numerous contributions in number theory in Landau's tract and other books. In my doctoral thesis (1947) his previous contributions (one with Kac) play an important role. While I walked down with him on a path towards Nassau Street, I told him about my problem on the lower limit of S_n as n becomes infinite, where S_n is the sum of n independent random variables with a common distribution. He was immediately interested and soon suggested an additional conditional condition for a lemma needed. This led to our first paper (1946). Later it was his idea on the Borel-Cantelli Lemma that led to another article. The most noteworthy example of his genius so far as I witnessed, is his way of solving a problem, now published in *Method and Applications of Analysis*, "Multinomial Ratio (Paul Erdős Solves A Problem)", International Press, 5 (2) 1998, pp.143-156. I proposed it and obtained a solution under the additional condition that the common distribution in a certain expression is symmetric, using characteristic function. Erdős disdained that method and did the general case using multinomial formula (very elementary) and the law of large numbers (very famous). No other solution exists.

I regret that article is not included in my "Chance and Choice" (World Scientific Publishing Co., 2004) in which there is a unique photo of him, his mother and my three years old son, taken by my wife in our kitchen.

During the period when Erdős lived in San Jose, California, he came often with a lady friend to our house. As soon as he saw an "epsilon" of ours, he would take out something from his pocket, drop it and catch it in mid-air to show his game. He called wine "poison" and a wife, "boss".

I have forgotten when Erdős "left". I leave it to the reader to figure out that Erdősian "left".

During the 50's he went to China and visited my parents in Hangchow- Marco Polo's Qunsai. I am most grateful to him for doing so.

* I wish to thank my wife for editing and typing this manuscript.

When he got the Wolf Prize, he gave the award to an Erdősian “cause” – to young Hungarian mathematicians. He gave an address at Stanford some twenty years ago and as usual offered cash awards for some open problems in graph theory and combinatorics. Later he came with another mathematician and had his photo taken in the garden. That may be the last time I saw him.

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